

A Study on Factors Affecting Online Shopping Intention Through Mobile Shopping Applications Of Gen Z: A Case Study In Vietnam

Trang Tran Pham Huyen

Vietnam- Korea University of Information and Communication Technology, the University of Danang, Danang, Vietnam

Abstract

Developing mobile shopping applications is a trend in the world and Vietnam. In addition, the popularization of the Internet makes online shopping increasingly popular with many generations of consumers in the era of digital transformation, and the dominant generation is generation Z. On the basis of researching related theories, the author proposes to propose a model to research factors affecting online shopping intentions through mobile applications of generation Z in the Vietnamese market. As a result, the research model was achieved with 8 observed variables and 35 indicators that directly impact the intention to shopping online through mobile shopping applications of generation Z in the Vietnamese market: Trust Factor, Perceived Risk, Effort Expectancy, Price Factor, Social Influence, Facilitating Conditions, Performance Expectancy.

Keywords: shopping online, Mobile application, gen Z, intention behavior

Date of Submission: 03-02-2024

Date of acceptance: 14-02-2024

I. Introduction

to new things and have high expectations for flexibility and complete Online shopping began to develop in the 1990s. This activity is becoming increasingly popular around the world as well as in Vietnam. Online shopping is a form of e-commerce that allows consumers to purchase goods or services directly from sellers via the Internet. Azizi and Javidani (2010) argue that online shopping brings greater simplicity to finding, locating, appropriate goods and services in an advanced, fast and low-cost manner. In the fierce competition to attract customers in addition to online business through websites, many businesses operating in the field of e-commerce have added business forms through platform-specific applications. mobile. Through electronic devices connected to the internet, consumers can shop anytime, anywhere without space and time restrictions. Therefore, online shopping through mobile applications attracts many different customers, especially Gen Z. In Vietnam, Gen Z (18-24 years old) currently accounts for 47% of the country's population. (45 million people) and is becoming a major factor contributing to the development of the current digital economy. They are open experiences. So what factors affect the intention to shop online via mobile applications of generation Z in Vietnam? This article will clarify this issue.

II. Literature review

Based on the inheritance of related models such as Theory of Reasoned Action, Theory of planned behavior, Technology acceptance model, Unified Theory of Acceptance and Use of Technology, the author uses the UTAUT technology acceptance model of Venkatesh et al (2003) as the research foundation and adding 3 additional observed variables: perceived risk, trust factor and price factor.

2.1. Performance Expectancy

PE (Performance Expectancy) is performance expectancy, defined as “the degree to which an individual believes that using the system will enable them to achieve gains in job performance” (Venkatesh et al., 2003).

The performance expectancy variable is derived from perceived usefulness from the TAM technology acceptance theory (Davis, 1989). The concept of effective expectations is pointed out as the expectation of usefulness, saving time and increasing customer productivity. Kang and Namkung (2018) emphasized that consumers perceive the level of performance and efficiency to positively affect customer trust when using online shopping services. For food delivery service apps, the performance expectancy factor has been examined to influence continued intention to use the app (Alalwan, 2019; Lee et al., 2019).

2.2. Effort Expectancy

Effort expectancy is defined as the level of ease associated with using the system. According to Venkatesh et al. (2003), this factor stems from perceived ease of use. Davis (1989) points out that when an individual perceives that an application can be easily used, the likelihood of its adoption is higher. When a system is uncomplicated, easy to use and operate, users will perceive the service provider as providing them with convenience and thereby increase their trust in that system (Gefen, Karahanna, & Straub, 2003). Zhou (2012) argues that ease of use is an attribute of building trust in mobile systems. When consumers feel that a technology is too complex to control, it becomes difficult to develop trust due to increased risk perception.

2.3. Social Influence

Social influence is defined as the degree to which an individual believes that others believe they should use the new system (Venkatesh et al., 2003). With the benefits the Internet brings, one of them is huge data and information. Others may include bosses, co-workers, subordinates, etc. According to Venkatesh et al (2003) social influence is described as subjective criteria in TRA, TAM 2, TPB/DTPB and C-TAM- TPB. Therefore, screening accurate and reliable information to make purchasing decisions is influenced by many factors, in which consumers will trust more products and services recommended by friends and relatives.

2.4. Facilitating Conditions

FC (Facilitating Conditions) are favorable conditions, defined as “the degree to which an individual believes that the technical and organizational infrastructure exists to support system use” (Venkatesh et al., 2003). The influence of FC on use will be moderated by age, monthly expenditure, and experience in favor of older workers with increases in experience. Research by Singh et al. (2017) has shown that consumers will tend to trust e-commerce systems if there is technological infrastructure such as the Internet and the availability of connected devices. Internet. Research by Lee et al (2019), Alalwan (2019) concluded that favorable conditions are one of the factors affecting the intention to continue using mobile shopping applications.

2.5. Trust Factor

Trust is a feeling of certainty about something. Customer trust here is the feeling of certainty about what e-commerce companies have committed to (McKnight, D., Chervany, N. L., 2001) Trust is an important factor in reducing feelings of insecurity and improving the simplicity of online transactions, thus developing an optimistic consumer intention towards online shopping. Trust can be a precursor to the intention to make online transactions, associated with consumer attitudes and behavior (Khosrow-Pour, 2018). Therefore, customer trust in mobile shopping applications, is believed to play an important role in consumers' e-shopping behavior.

2.6. Perceived Risk

Perceived Risk is a consumer's perception of uncertainty and negative consequences associated with purchasing a product or service (Ruyter & Kleijnen, Wetzels, 2007). Based on previous studies showing that the dimensions of perceived risk are context dependent and according to the current literature on commercial valuation, a risk construct containing the following three components is integrated into the conceptual framework. concept: (1) financial risk; (2) performance risk, which refers to the possibility of an application being processed and not performing in the way originally intended; and (3) security risk, which refers to the possibility of losing control of personal information. Therefore, the greater the risks of mobile shopping applications, the more issues and concerns about the use of mobile technology, the more cautious consumers are in evaluating mobile shopping applications. mobile devices.

2.7. Price Factor

Price is understood as the consumer's perceived balance between the benefits a service brings and the monetary cost of using them (Venkatesh et al., 2012). Price has a positive effect when consumers perceive that the benefits they receive are greater than the costs they have to spend. Research by Rahi, Ghani, and Muhamad (2017) shows that the perception of reasonable prices positively affects trust when shopping online.

2.8. Behavioral intention

Behavioral intention reflects consumers' beliefs related to the chain of consumption behavior. According to Ajzen, it is described as a personal motivation in the consumer's perception of plans when making a decision to perform a particular behavior.

According to Ajzen (1988), intention is a function of three factors: first, attitudes towards behavior, second is subjective norms, third is perceived behavioral control. According to Philips Kotler and colleagues (2001), they believe that: while choosing purchasing options, customers will evaluate the options and intend to buy. According to Elbeck (2008), purchase intention is the likelihood that a consumer is willing to purchase a

product. According to Dodds et al (1991), purchase intention represents the likelihood that consumers will purchase a product.

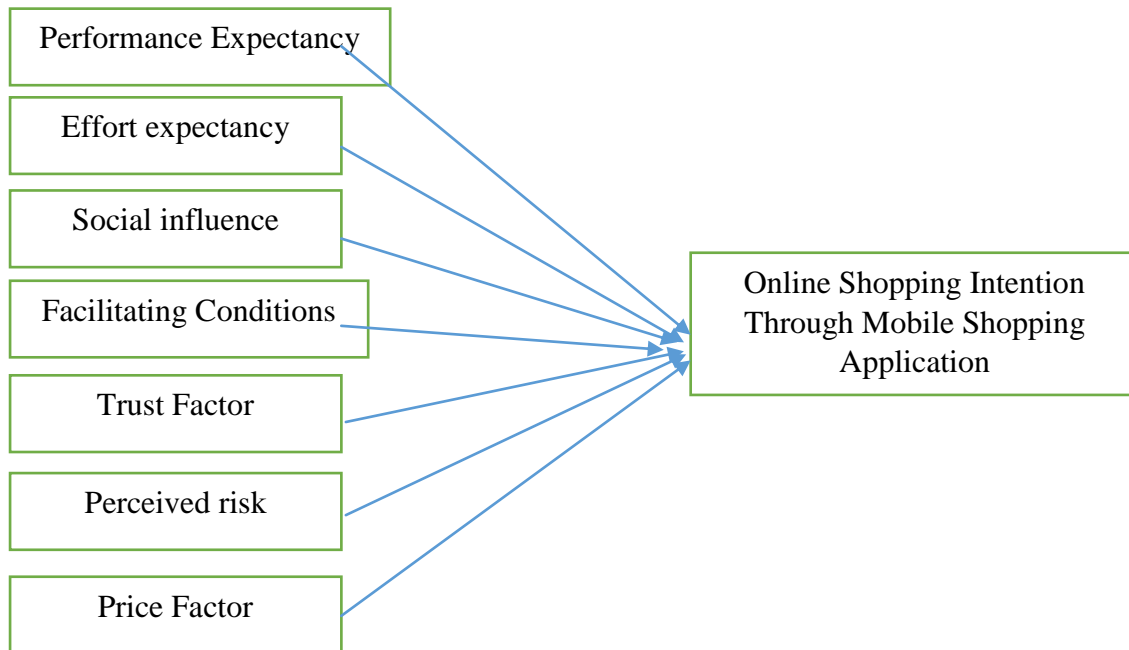


Figure 1. Proposed research model

III. Methodology

Research Methods

- Qualitative research: This is a preliminary research step conducted with group discussion techniques and mock interviews with experts in the field of marketing. The purpose of this method is to adjust and supplement the scale.

- Quantitative research: This is an official research step conducted with direct customer interview techniques through questionnaires. Data were processed using SPSS 23.0 software to test the scale using Cronbach Alpha reliability coefficient, EFA analysis, correlation analysis and regression analysis.

Sampling: research subjects are generation Z consumers born from 1997 to 2012. The sample size is 500 according to convenience sampling method. The study used a 5-level Likert scale with 1 - completely disagree to 5 - completely agree. The questionnaire was built with 8 scales with 35 observed variables measuring 8 research concepts including 1 dependent variable and 7 independent variables. Data collected after cleaning was analyzed using SPSS 23.0 software.

The survey sample size is 500. The number of ballots issued was 500, the number of ballots received was 488. After review, the number of satisfactory responses was 480 (45.85% were female and 54.15% were male).

IV. Results

4.1. Cronbach's Alpha test

Table 1: Results of Cronbach's Alpha test of independent variables

The scale	Observable variables	Cronbach's Alpha	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Performance Expectancy (PE)	5	0,852	0,653	0,832
Effort Expectancy (EE)	4	0,711	0,603	0,695
Social Influence (SI)	3	0,705	0,607	0,597
Facilitating Conditions (FC)	4	0,784	0,612	0,625
Trust Factor (TF)	6	0,654	0,693	0,631
Perceived Risk (PR)	7	0,854	0,739	0,820
Price Factor (PF)	3	0,689	0,693	0,621
Online Shopping Intention through Mobile Shopping Application (OSI)	3	0,733	0,693	0,659

Source: Calculated from survey data of the study

The results of Table 1 evaluate the reliability of the scale using Cronbach's Alpha coefficient for 35 observed variables belonging to 8 factor groups, all meeting the requirements: Cronbach's Alpha coefficient reaches from 0,603 to 0,854 (required greater than 0,6) and The Cronbach's Alpha coefficients in the column if the variable is type are all smaller than the Cronbach's Alpha coefficient. Therefore, all of the above observed variables are retained for further exploratory factor analysis (EFA).

4.2. Exploratory factor analysis

The results of exploratory factor analysis (EFA) of independent variables using the Principal components extraction method and Varimax rotation show that: 35 observed variables (remaining) measure 8 factors affecting online shopping intention. through the mobile application is extracted with coefficient KMO = 0,849 and Sig. = 0,000; Extracted variance = 73,764%, at Eigenvalue = 1,366, and all variables have satisfactory factor loadings (> 0,5).

Thus, the results of exploratory factor analysis (EFA) of the independent and dependent variables are appropriate and this result can be used for regression analysis in the next step.

4.3. Correlation And Regression Analysis

Correlation analysis was performed between the dependent variable Online Shopping Intention through Mobile Shopping Application(OSI) with independent variables: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Trust Factor (TF), Perceived Risk (PR), Price Factor (PF).

The results of the correlation analysis are presented in the table below:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,809 ^a	0,505	0,490	0,56087

Table 2. Result of R square.

Model		Unstandardized Coefficients		Standardized	t	Sig.	Collinearity Statistics	
		B	Std.Error	Beta			Tolerance	VIF
1	(Constant)	-3,381	0,303		-15,813	0,000		
	PE	0,323	0,059	0,185	4,535	0,000	0,563	1,755
	EE	0,444	0,029	0,227	6,662	0,000	0,567	1,753
	SI	0,374	0,061	0,206	5,789	0,000	0,634	1,602
	TF	0,724	0,046	0,430	15,698	0,000	0,889	1,011
	FC	0,351	0,065	0,201	5,484	0,000	0,689	1,542
	PR	0,744	0,046	0,420	15,618	0,000	0,882	1,011
	PF	0,371	0,095	0,212	5,444	0,000	0,689	1,542

Table 3: Result of coefficients

The standardized regression equation of the research model has the following form:

$$OSI = 0,185*PE + 0,227* EE + 0,206*SI + 0,430*TF + 0,201* FC + 0,420*PR+ 0,212*PE + e$$

V. Limitations and Further Research

The results show that there are 7 factors in the theoretical model that influence consumers' online shopping intention through mobile applications of generation Z in Vietnam, arranged in order of importance:Trust Factor, Perceived Risk, Effort Expectancy, Price Factor, Social Influence, Facilitating Conditions, Performance Expectancy.

The limitation of this study is that it has not tested the interactive relationship between factors affecting consumers' online shopping intentions. To test the relationship between factors in the research model, you should use the linear structural model testing tool SEM, which will give more accurate research results. Furthermore, because the research time was relatively short, the sample size was not really large, so the representativeness of the whole population was limited. Future studies can increase the observation sample size as well as consider additional barrier factors that hinder consumers' shopping intentions and suggest policy implications for online businesses.

References

[1]. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
 [2]. Ahmed, S., Munir, M. S., & Islam, T. (2022). Online Shopping: A Survey on Consumer Buying Behavior in Bangladesh. *European Scientific Journal*, 18, 93-105.
 [3]. Fishbein, M., & Azjen, I. (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.

- [4]. Ferdous, J., Alam, M. T., & Mahbub, A. (2022). Drivers for Online Shopping: Considering the Most Important Factors in Dhaka Metropolis, Bangladesh. *Expert Journal of Marketing*, 10, 31-42.
- [5]. Hossain, T., Afrin, H., Sultana, R., & Rosul Itu, R. (2021). Consumers' Attitudes towards Online Shopping: A Comparative Study of Male and Female Consumers. *Journal of Marketing and Consumer Research*, 75, 36-44.
- [6]. Islam, M. Z. (2020). 70PC Users Spend More than an Hour on Social Media: Study. *The Daily Star*.
- [7]. Gardner, L. C., Forsythe, S.M., Liu, C., & Shannon, D. (2006). 'Development of a scale to measure the perceived benefits and risks of online shopping'. *Journal of Interactive Marketing*, 20(2), 55-75
- [8]. Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: an integrated model. *MIS Quarterly*, 27, 51-90
- [9]. Hsu, C. L., Lin, J. C. C., & Chiang, H. S. (2013). 'The effects of blogger recommendations on customers' online shopping intentions. *Internet Research*, Vol 23, No. 1, 69 – 88
- [10]. Khosrow-Pour, M. (2018). *Optimizing current practices in e-services and mobile applications*. Hershey: Business Science Reference.
- [11]. Kakon, K. (2022). Technological Adaptation in Tourism Events, Fairs, and Festivals: Way to a Revolutionary Transformation in Bangladesh. In A. Hassan (Eds.), *Technology Application in Tourism Fairs, Festivals and Events in Asia* (pp. 167-180). Springer.
- [12]. Nor, K. M., Sin, S. S., & Al-Agaga, A. M. (2012). 'Factors Affecting Malaysian young consumers' online purchase intention in social media websites'. *Procedia-Social and Behavioral Sciences*, 40, 326-333.
- [13]. McKnight, D., Chervany, N. L.,(2001) Trust and Distrust Definitions: One Bite at a Time
- [14]. Rahi, S., Ghani, M. A., & Muhamad, F. J. (2017). Inspecting the role of intention to trust and online purchase in developing countries. *Journal of Socialomics*, 6(1), 1-7. doi:10.41 72/2167-0358.1000191
- [15]. Ruyter & Kleijnen, Wetzels,(2007), An assessment of value creation in mobile service delivery and the moderating role of time consciousness
- [16]. Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology". *MIS Quarterly*, 36(1), 157–178.